(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau





(43) International Publication Date 14 October 2004 (14.10.2004)

PCT

(10) International Publication Number WO 2004/088983 A3

(51) International Patent Classification⁷:

H04N 7/16

(21) International Application Number:

PCT/IB2004/000972

- (22) International Filing Date: 26 March 2004 (26.03.2004)
- (25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 0307694.0

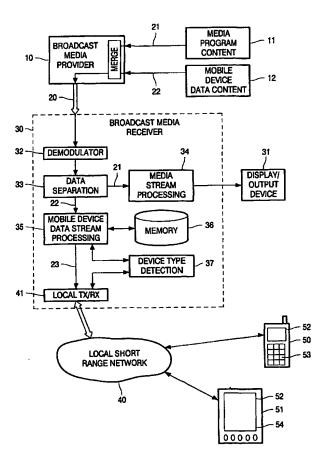
3 April 2003 (03.04.2003)

- (71) Applicant (for all designated States except US): KONIN-KLIJKE PHILIPS ELECTRONICS N.V. [NL/NL]; Groenewoudseweg 1, NL-5621 BA Eindhoven (NL).
- (72) Inventors; and
- Inventors/Applicants (for US only): HOULDSWORTH, Richard, J. [GB/GB]; c/o Philips Intellectual Property & Standards, Cross Oak Lane, Redhill, Surrey RH1 5HA

- (GB). BENJES, Immo [DE/GB]; c/o Philips Intellectual Property & Standards, Cross Oak Lane, Redhill, Surrey RH1 5HA (GB).
- (74) Agent: WILLIAMSON, Paul, L.; c/o Philips Intellectual Property & Standards, Cross Oak Lane, Redhill, Surrey RH1 5HA (GB).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH,

[Continued on next page]

(54) Title: BROADCAST DELIVERY TO A WIRELESS DEVICE



(57) Abstract: A broadcast media receiver (30) enables delivery of application programs and other data streams transmitted over broadcast media transmission networks to mobile communication devices. The receiver includes a receiver unit for receiving a first data stream (21) of broadcast media and at least one second data stream (22) over a first communication channel (20); data separation means (33) for separating the second data stream (22) from the first data stream (21); a transmitter / receiver unit (41) for communicating with mobile communication devices (50, 51) within a local, short range, transient wireless network (40) using a second communication channel; a monitoring device (37) for detecting a mobile communication device present on the local wireless network, and for determining a device type and/or configuration thereof; and a delivery device (35, 41) for delivering a third data stream (23), comprising at least part of said second data stream (22), to said mobile communication device according to the determined device type and/or configuration.



GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declaration under Rule 4.17:

— as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY,

KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, Fl, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments
- (88) Date of publication of the international search report: 16 December 2004

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

INTERNATIONAL SEARCH REPORT

International Application No
I/IB2004/000972

A. CLASSIF IPC 7	FICATION OF SUBJECT MATTER H04N7/16			
According to	International Patent Classification (IPC) or to both national classific	ation and IPC		
B. FIELDS	SEARCHED			
IPC 7	cumentation searched (classification system followed by classificat $H04N$			
	ion searched other than minimum documentation to the extent that			
Electronic da	ata base consulted during the International search (name of data baternal	ase and, where practical, search terms used)	
0.00011145	ENTS CONSIDERED TO BE RELEVANT			
Category °	Citation of document, with indication, where appropriate, of the re	elevant passages	Relevant to claim No.	
Х	US 2002/056112 A1 (STEENKAMP JAN	ET AL)	1-3,6-35	
Υ	9 May 2002 (2002-05-09) abstract		4,5	
	paragraphs '0008!, '0009! paragraphs '0019! - '0022!, '00 '0026!	24!,		
	pulugiupilo ocio: ccimi,	47! 57!		
		-/		
X Fur	ther documents are listed in the continuation of box C.	Patent family members are listed	in annex.	
1 '	ategories of cited documents: nent defining the general state of the art which is not	"T" later document published after the int or priority date and not in conflict with cited to understand the principle or it	h the application but	
considered to be of particular relevance "E" earlier document but published on or after the international filling date		invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to		
which citation	nent which may throw doubts on priority claim(s) or his cited to establish the publication date of another on or other special reason (as specified)	"Y" document of particular relevance; the cannot be considered to involve an i document is combined with one or n	claimed invention nventive step when the	
other	nent referring to an oral disclosure, use, exhibition or r means nent published prior to the International filing date but than the priority date claimed	ments, such combination being obvi in the art. *&' document member of the same pater	ous to a person skilled	
	e actual completion of the International search	Date of malling of the international se	arch report	
	28 September 2004	05/10/2004		
Name and	mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL – 2280 HV Rijswijk	Authorized officer		
	Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Ricardo, P		

INTERNATIONAL SEARCH REPORT

International Application No

ation) DOCUMENTS CONSIDERED TO BE RELEVANT			
	Relevant to claim No.		
US 2001/055341 A1 (MALLART RAOUL ET AL) 27 December 2001 (2001-12-27)	4,5 1-3, 6-13, 17-35		
abstract paragraph '0012! - paragraph '0014! paragraph '0024! - paragraph '0028! paragraphs '0033!, '0034! f1gures 3,4			
WO 01/47248 A (KONINKL PHILIPS ELECTRONICS NV) 28 June 2001 (2001-06-28) abstract page 2, line 12 - page 3, line 14 page 3, line 29 - page 4, line 27 page 7, line 8 - line 24 figures 1,2 claim 1	1-35		
WO 02/21831 A (MORDUJOVICH EDUARDO; KARGO INC (US); GORDON JON (US); HERIGSTAD DALE) 14 March 2002 (2002-03-14) page 1, line 12 - page 3, line 20 page 5, line 7 - line 18 page 8, line 15 - line 25 figure 24	1-13, 17-35		
WO 01/17262 A (KOPLAR EDWARD J; WITHERS JAMES G (US); CIARDULLO DANIEL A (US); KOPLA) 8 March 2001 (2001-03-08) abstract page 1, line 24 - page 2, line 13 page 6, line 33 - page 8, line 2 page 9, line 32 - page 11, line 21 figure 2A	1-13, 17-35		
	US 2001/055341 A1 (MALLART RAOUL ET AL) 27 December 2001 (2001-12-27) abstract paragraph '0012! - paragraph '0014! paragraph '0024! - paragraph '0028! paragraphs '0033!, '0034! figures 3,4 WO 01/47248 A (KONINKL PHILIPS ELECTRONICS NV) 28 June 2001 (2001-06-28) abstract page 2, line 12 - page 3, line 14 page 3, line 29 - page 4, line 27 page 7, line 8 - line 24 figures 1,2 claim 1 WO 02/21831 A (MORDUJOVICH EDUARDO ; KARGO INC (US); GORDON JON (US); HERIGSTAD DALE) 14 March 2002 (2002-03-14) page 1, line 12 - page 3, line 20 page 5, line 7 - line 18 page 8, line 15 - line 25 figure 24 WO 01/17262 A (KOPLAR EDWARD J ; WITHERS JAMES G (US); CIARDULLO DANIEL A (US); KOPLA) 8 March 2001 (2001-03-08) abstract page 1, line 24 - page 2, line 13 page 6, line 33 - page 8, line 2 page 9, line 32 - page 11, line 21		

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No
T/IB2004/000972

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
US 2002056112	A1	09-05-2002	AU	5868500 A	28-12-2000
02 2002020112	ΔŦ	03 03 E00E	CA	2375895 A1	14-12-2000
			EP	1186173 A1	13-03-2002
			MO	0076217 A1	14-12-2000
			AT	253798 T	15-11-2003
				5594400 A	28-12-2000
			AU	2374104 A1	14-12-2000
			CA		11-12-2003
			DE	60006387 D1	09-09-2004
			DE	60006387 T2	
			EP	1186171 A1	13-03-2002
			ES	2209906 T3	01-07-2004
			WO	0076216 A1	14-12-2000
US 2001055341	A1	27-12-2001	CN	1386372 T	18-12-2002
03 2001033341	,,,	 22 2	WO	0191464 A1	29-11-2001
			EP	1293095 A1	19-03-2003
			JP	2003534741 T	18-11-2003
WO 0147248		 28-06-2001	CN	1363184 T	07-08-2002
WU U14/240	Λ.	20 00 2001	WO	0147248 A2	28-06-2001
			EP	1195052 A2	10-04-2002
			ĴΡ	2003518832 T	10-06-2003
WO 0221831	 А	 14-03-2002	AU	9502901 A	22-03-2002
MO 0551921	^	14 03 2002	BR	0113763 A	22-06-2004
			CA	2421775 A1	14-03-2002
		•	CN	1462545 T	17-12-2003
			EP	1316209 A2	04-06-2003
			JP	2004508775 T	18-03-2004
			WO	0221831 A2	14-03-2002
				2002100063 A1	25-07-2002
			US 	XUUZIUUUG XI	
WO 0117262	Α	08-03-2001	AU	7475100 A	26-03-2001
MO OII\COC	А	55 55 2561	CA	2384198 A1	08-03-2001
			CN	1382345 T	27-11-2002
			EP	1210819 A1	05-06-2002
			ĴΡ	2003508978 T	04-03-2003
			WO	0117262 A1	08-03-2001
			US	6363868 B1	02-04-2002